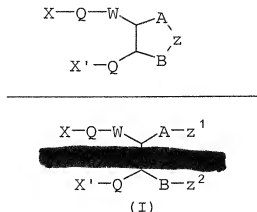


IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

Claims 1-14 (canceled)

15. (withdrawn-currently amended) A process for preparing a compound of the general formula I



in which one of X and X' represents a polymer, and the other represents a hydrogen atom;

each Q independently represents a linking group;

W represents an electron-withdrawing moiety or a moiety preparable by reduction of an electron-withdrawing moiety; or, if X' represents a polymer, X-Q-W-together may represent an electron withdrawing group; and in addition, if X represents a polymer, X' and electron withdrawing group W together with the interjacent atoms may form a ring;

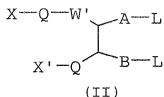
Z each of Z¹ and Z² independently represents a single protein group derived from a biological molecule, each of which is linked to A and B via two thiol groups generated by reduction of a disulfide bridge in the protein a nucleophilic moiety; or Z¹ and Z² together represent a single group derived from a biological molecule which is linked to A and B via two nucleophilic moieties;

A is a C₁₋₅ alkylene or alkenylene chain; and

B is a bond or a C₁₋₄ alkylene or alkenylene chain;

wherein the process comprises reducing a disulfide bridge in the protein and reacting the reduced protein with either

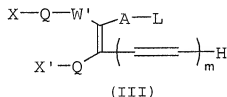
- (i) a compound of the general formula II



in which X, X', Q, A and B have the meanings given for the general formula I;

W' represents an electron-withdrawing group or, if X' represents a polymer, X-Q-W' together may represent an electron withdrawing group; and
each L independently represents a leaving group; or

- (ii) a compound of the general formula III



in which X, X', Q, W', A and L have the meanings given for the general formula I, and in addition if X represents a polymer, X' and electron-withdrawing group W' together with the adjacent atoms may form a ring, and m represents an integer 1 to 4; with compounds of the general formula Z^1Nu or Z^2Nu in which each of Z^1 and Z^2 independently represents a group derived from a biological molecule, or a compound of the formula $Z(Nu)_2$ in which Z represents a biological molecule, and each Nu independently represents a nucleophilic group; and optionally converting a resulting compound of the formula I in which W is an electron-withdrawing group into a corresponding compound of the formula (I) by reduction of the group W'.

16. (withdrawn-currently amended) The process as claimed in claim 15, in which the [[a]] polymer ~~X or X'~~ is a homo- or copolymer selected from the group consisting of polyalkylene glycols, polyvinylpyrrolidones, polyacrylates, polymethacrylates,

polyoxazolines, polyvinylalcohols, polyacrylamides, polymethacrylamides, HPMA copolymers, polyesters, polyacetals, poly(ortho ester)s, polycarbonates, poly(imino carbonate)s, polyamides, copolymers of divinylether-maleic anhydride and [[or]] styrene-maleic anhydride, polysaccharides, and [[or]] polyglutamic acids, ~~any of said homo- or co-polymers optionally being derivatized or functionalized.~~

17. (withdrawn-currently amended) The process as claimed in claim [[16]] 15, in which the polymer is a polyethylene glycol.

18. (withdrawn) The process as claimed in claim 15, in which each linking group Q independently represents a direct bond, an alkylene group, or an optionally-substituted aryl or heteroaryl group, any of which may be terminated or interrupted by one or more oxygen atoms, sulphur atoms, -NR groups in which R represents an alkyl or aryl group, keto groups, -O-CO- groups and/or -CO-O- groups.

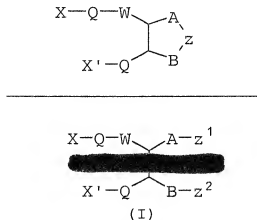
19. (withdrawn) The process as claimed in claim 15, in which W' represents a keto or aldehyde group CO, an ester group -O-CO- or a sulphone group -SO₂-.

Claims 20-23 (canceled)

24. (withdrawn) The process as claimed in claim 15, in which the or each leaving group L represents -SR, -SO₂R, -OSO₂R, -N⁺R₃, -N⁺HR₂, -N⁺H₂R, halogen, or -OØ, in which R represents an alkyl or aryl group and Ø represents a substituted aryl group containing at least one electron withdrawing substituent.

each L independently represents a leaving group; and m represents an integer 1 to 4.

27. (currently amended) A compound having the general formula I



in which one of X and X' represents a polymer homo- or copolymer selected from the group consisting of polyalkylene glycols, polyvinylpyrrolidones, polyacrylates, polymethacrylates, polyoxazolines, polyvinylalcohols, polyacrylamides, polymethacrylamides, HPMA copolymers, polyesters, polyacetals, poly(ortho ester)s, polycarbonates, poly(imino-carbonate)s, copolymers of divinylether-maleic anhydride or styrene-maleic anhydride, polysaccharides, or polyglutamic acids, any of said homo- or co-polymers optionally being derivatized or functionalized, and the other represents a hydrogen atom;

each Q independently represents a linking group;

W represents an electron-withdrawing moiety or a moiety preparable by reduction of an electron-withdrawing moiety; or, if X' represents a polymer, X-Q-W-together may represent an electron withdrawing group; and in addition, if X represents a polymer, X' and electron withdrawing group W together with the interjacent atoms may form a ring;

Z each of Z¹ and Z² independently represents a single protein group derived from a biological molecule, each of which is linked to A and B via two thiol groups generated by reduction of a disulfide bridge in the protein-a nucleophilic moiety; or Z¹ and Z²

together represent a single group derived from a biological molecule which is linked to A and B via two nucleophilic moieties;

A is a C₁₋₅ alkylene or alkenylene chain; and

B is a bond or a C₁₋₄ alkylene or alkenylene chain.

28. (currently amended) The compound as claimed in claim 27, in which the polymer X or X' is a polyethylene glycol.

29. (previously presented) The compound as claimed in claim 27, in which each linking group Q independently represents a direct bond, an alkylene group, or an optionally-substituted aryl or heteroaryl group, any of which may be terminated or interrupted by one or more oxygen atoms, sulphur atoms, -NR groups in which R represents an alkyl or aryl group, keto groups, -O-CO- groups and/or -CO-O- groups.

30. (previously presented) The compound as claimed in claim 27, in which W represents a keto or aldehyde group CO, an ester group -O-CO- or a sulphone group -SO₂-, or a group obtained by reduction of such a group, or X-Q-W- together represent a cyano group.

31. (currently amended) The compound as claimed in claim 27, in which the polymer is a homo- or copolymer selected from the group consisting of polyalkylene glycols, polyvinylpyrrolidones, polyacrylates, polymethacrylates, polyoxazolines, polyvinylalcohols, polyacrylamides, polymethacrylamides, HPMA copolymers, polyesters, polyacetals, poly(ortho ester)s, polycarbonates, poly(imino carbonate)s, polyamides, copolymers of divinylether-maleic anhydride and styrene-maleic anhydride, polysaccharides, and polyglutamic acids Z¹ and Z² together represent a single biological molecule.

Claims 32-34 (canceled)

35. (previously presented) A pharmaceutical composition comprising a physiologically tolerable compound as claimed in claim 27, together with a pharmaceutically acceptable carrier.

36. (withdrawn) A method for treating a patient, the method comprising administering a pharmaceutically-effective amount of the pharmaceutical composition as claimed in claim 35 to the patient.

37. (new) A pharmaceutical composition comprising a physiologically tolerable compound as claimed in claim 28, together with a pharmaceutically acceptable carrier.

38. (new-withdrawn) A method for treating a patient, the method comprising administering a pharmaceutically-effective amount of the pharmaceutical composition as claimed in claim 37 to the patient.

39. (new) A pharmaceutical composition comprising a physiologically tolerable compound as claimed in claim 31, together with a pharmaceutically acceptable carrier.

40. (new-withdrawn) A method for treating a patient, the method comprising administering a pharmaceutically-effective amount of the pharmaceutical composition as claimed in claim 39 to the patient.